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ABSTRACT

From 1995-98, The Consortium for Policy Research in Education (CPRE) teacher compensation researchers conducted interviews and survey questionnaires of teachers and principals in three sites to measure the motivational effects of school-based performance award (SBPA) programs. When a school met preset educational objectives, the SBPA programs in Charlotte-Mecklenburg (North Carolina) and Kentucky provided salary bonuses to all the teachers in the school, and the SBPA program in Maryland provided a monetary award to the school for school improvements. CPRE researchers found that the SBPA programs in two of the three sites helped teachers focus on student performance goals. However, the motivational power of the programs varied due to differences in teachers' beliefs. For instance, it mattered whether teachers believed their individual effort would lead to increases in schoolwide student performance, the SBPA system was fair and the award amount was worth the extra effort and stress, and whether they would be given the award if they could produce the improved performance results. The relationship between teachers, motivated by school-based performance awards or sanctions and improvements in school performance, also varied and may have been attributable to differences in the actual programs as well as the local context. Contains 23 references. (DFR)

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Policy Briefs

Reporting on issues in education reform

Graduate School of Education • *University of Pennsylvania* • *RB-29-February 2000*

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The Motivational Effects of School-Based Performance Awards

by Carolyn Kelley, Allan Odden, Anthony Milanowski, and Herbert Heneman III

From 1995-1998, CPRE teacher compensation researchers conducted extensive interviews and survey questionnaires of teachers and principals in three sites to measure the motivational effects of school-based performance award (SBPA) programs. When a school met preset educational objectives, usually related to increases in student achievement, the SBPA programs in Charlotte-Mecklenburg (North Carolina) and Kentucky provided salary bonuses to all the teachers in the school and the SBPA program in Maryland provided a monetary award to the school for school improvements.

CPRE researchers found that the SBPA programs in two of the three sites helped teachers focus on student performance goals. However, the motivational power of the programs varied due to differences in teachers' beliefs. For instance, it mattered whether teachers believed their individual effort would lead to increases in schoolwide student performance, the SBPA system was fair and the award amount was worth the extra effort and stress, and that they would be given the award if they could produce the improved performance results. The relationship between teachers who were motivated by school-based performance awards or sanctions and improvements in school performance also varied and may have been attributable to differences in the actual programs as well as the local context.

The Consortium for Policy Research in Education (CPRE) studies how various state and local education policies support student learning. In order to promote improvements in policy design and implementation, CPRE currently conducts research in four areas vital to education reform: accountability, capacity-building, governance, and school finance and resource reallocation. Among these studies is the Teacher Compensation project, which through research, conceptual development, and technical assistance seeks to explore ways in which compensation might be better used to support the education of all students to high standards and the continued professionalization of teaching. The project seeks to better understand the role of compensation in organizational devel-

The Consortium for Policy Research in Education (CPRE) studies alternative approaches to education reform in order to determine how state and local policies can promote student learning. Currently, CPRE's work is focusing on accountability policies, efforts to build capacity at various levels within the education system, methods of allocating resources and compensating teachers, and governance changes like charters and mayoral takeover. The results of this research are shared with policymakers, educators, and other interested individuals and organizations in order to promote improvements in policy design and implementation. CPRE is supported by the National Institute on Educational Governance, Finance, Policymaking and Management, Office of Educational Research and Improvement, U.S. Department of Education.

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opment and ultimately to build on the strengths of existing compensation systems in education and other sectors to make compensation an important element in the support of standards-based education reform and teaching excellence.

Previous CPRE publications, such as Susan Fuhrman's *The New Accountability* (1999), emphasize the importance of linking policy concepts to achieve the greatest effect. For instance, new accountability systems that contain clear standards and strong incentives, but pay no attention to building the capacity of teachers and administrators to support such efforts, will not work. Conversely, capacity-building without a clear system goal might also be ineffective.

One popular accountability strategy being used by an increasing number of states and districts across the country is school-based performance award programs. These programs are intended to align individual or school-level monetary incentives with a school's ability to improve student achievement. CPRE teacher compensation researchers examined several school-based performance award programs to see if the design and implementation of the programs achieved the intended results.

Description of the Study

Through on-site interviews with teachers and principals (all sites), and mail surveys of teachers (Charlotte-Mecklenburg and Kentucky) and principals (all three sites), CPRE researchers studied the motivational effects of school-based performance award programs and whether teachers' reactions correlated with improved student achievement. The researchers used as their conceptual framework two well-known theories of individual motivation: expectancy theory and goal-setting theory, which have an extensive research base. The research design was not intended to measure if SBPA programs *caused* improvements in student achievement but rather to discern the motivational effects of the SBPA programs on teachers.

The first motivational theory, *expectancy theory*, suggests that teachers are most motivated when they have a strong belief that they can achieve specified goals—their individual actions will positively influence student achievement and valued consequences will be achieved if the goals are met. This theory directly links with issues of teacher and organizational capacity, such as the extent to which teachers feel they are supported by their principals and are given appropriate resources like professional development to reach SBPA goals. Moreover, the motivational impact also would depend on whether teachers feel they have the pedagogical and content knowledge and the curricular resources necessary to help students reach the goals. In the context of SBPAs, the second theory, *goal-setting theory*, translates into the idea that clear and specific student achievement goals are more motivating for teachers than unclear or conflicting goals.

These two theories of motivation also suggest that for SBPA programs to work well, they need to have three major impacts on teachers. First, there would be an increased focus on student achievement goals due to goal clarity and the attachment of valued consequences to goal achievement. Second, teachers would have increased motivation to "do what needs to be done" to achieve the goals by increasing their commitment to the goals and attaching desirable and undesirable outcomes to meeting or not meeting the goals. Finally, school staff would increase their demand for the organizational resources needed for them to achieve the goals.

Six other conditions must also be present to maximize the likelihood that SBPA programs would have these impacts on teachers. First, teachers must believe that if they try they can succeed in achieving program goals. Second, the positive outcomes associated with the program must be greater than the negative outcomes, such as increased stress. Third, the bonus must be aligned with other motivating outcomes, such as seeing one's students achieve at higher levels. Fourth, the SBPA program's goals must be consistent with the goals of other improvement programs in place at the school. Fifth,

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the program must be perceived as fair, both in the likelihood of success and in its operation. Finally, the program must be properly implemented—the bonus amounts must be large enough for teachers to want to work toward the bonus, there must be a commitment to funding and other needed resources, the plan must be well understood and communicated, and so on.

A brief summary of the particular SBPA programs studied follows. Please note that although Kentucky and Charlotte-Mecklenburg represent two jurisdictions without formal collective bargaining (Maryland has strong collective bargaining), the findings are still relevant to contexts with stronger union roles. CPRE is using the results of this research in its work with the Teacher Union Reform Network to strengthen the design of new or second generation SBPA programs.

Charlotte-Mecklenburg's Benchmark Goals Program

The Charlotte-Mecklenburg School District created the Benchmark Goals Program in 1991 to help reverse a record of low student achievement and limited success with minority students. The original Benchmark Goal Program set improvement goals for student achievement in nine areas: primary grade readiness, absenteeism, social studies, end-of-grade reading, writing, pre-algebra, dropouts, higher level course enrollment, and end-of-course subject matter mastery. Additionally, schools had between 14 and 44 sub-goals. (There have been changes since the initial program, including the creation of a state-level SBPA program and adaptations to Charlotte-Mecklenburg's program intended to align it with the state program.)

Student achievement in cognitive areas was assessed by standardized multiple-choice tests, and performance baselines were established in 1991-1992. In every area, annual improvement goals were set for schools in each subsequent school year, and schools received points for meeting those goals. Schools that received 75 or more points were designated as "exemplary" and their certified staff received $1,000 and support staff $400. Schools that earned between 60 and 74 points were designated as "outstanding" and their certified staff received $750 and support staff $300. Staff in schools that earned less than 60 points were not eligible for a bonus. There were no formal sanctions for schools that failed to achieve the accountability goals in any one year; however, schools with chronically low achievement could be placed in the Priority Schools program where, with district assistance, they prepared special improvement plans and identified resources needed to improve student achievement.

Kentucky's Accountability Program

The Kentucky Accountability Program was created as part of the Kentucky Education Reform Act of 1990. It held schools accountable for improvement in seven academic subjects (reading, writing, math, science, social studies, arts/humanities, and vocational/practical living), and several school-level indicators, such as student attendance, retention, and dropout rates. The school performance index, derived from assessments that were part of the Kentucky Instructional Results Information System (KIRIS), consisted of portfolio entries, performance events, open-response, and multiple-choice questions.

Beginning with the 1991-1992 school year, the state set a series of two-year goals for each school, with schools expected to increase their KIRIS scores by 10 percent of the distance between their school's baseline score and a long-term target that is equivalent to 100 percent of students scoring at the proficient level. The initial targets were based on the 1991-1992 score and were reset after each accountability cycle. If schools exceeded their goal, they were designated as "reward" schools and received funds that could be used for any purpose, including salary bonuses, as decided by a vote of the school's certified staff. The amount awarded to each school was based on the number of certified staff employed and the degree to which the school exceeded its goals. The minimum award amount was set at 50 percent of the maximum award amount; the average bonus paid to teachers at the end of the first accountability cycle (1991-1994) was approximately $2,600.

Schools that dropped more than five points below baseline were designated "in crisis." Distinguished educators—experienced teachers and administrators trained by the state to provide technical assistance—were assigned to crisis schools and had the authority to terminate teachers and override school site council decisions if they deemed it appropriate. In the first biennium of the program, the crisis category was suspended due to concerns about the reliability of the assessment instrument. The crisis category was reinstated for the second biennium and nine schools were designated "in crisis."

Maryland's School Performance Program

The Maryland School Performance Program monitored school progress toward state standards, rewarded school success with monetary awards, and assisted or reconstituted schools in which performance was declining. The school performance

index, a weighted average of a school's relative distance from satisfactory standards for attendance and student performance on two tests (the Maryland School Performance Assessment Program and the Maryland Functional Test) was used to measure school performance and progress.

Elementary and middle schools that achieved a "sustained and significant" level of improvement as judged by the Maryland Department of Education were eligible for a monetary bonus that could be used for school improvements but not for bonuses to staff. The amount of each school's award depended on the size of the state appropriation, the number of eligible schools, and the number of students in the reward schools. Between 1996 and 1998, awards ranged from about $14,500 to $64,600 per school.

The Maryland State Department of Education released a report card each December on state and district progress toward meeting the standards, thus creating incentives in the form of public recognition or public criticism. Schools that failed to improve faced the possibility of some form of reconstitution, such as modifying the school's instructional program, replacing the school's administrative or teaching personnel, or even having a third party contracted to run the school. To date, 97 schools have been listed as eligible for reconstitution, with the majority of them being in Baltimore City.

What We Learned

Our empirical research showed that teachers working in SBPA program schools knew the goals of the program, understood them, and were committed to their achievement at high levels relative to other types of education reform efforts. Teachers who placed greater value on the bonus, and believed that if performance improved the bonus would be paid as promised, reported higher levels of goal clarity and commitment. Most teachers reported that they were trying to meet the goals of the program.

Goal clarity was positively related to school performance. Our research suggested that providing rewards for too many goals could diffuse effort and responsibility so teachers would lose focus on what steps they could take to achieve the goals. Conversely, limiting rewards to too few goals, just reading and mathematics achievement, for example, could result in inattention to important but unmeasured outcomes.

Similarly, our research found that the goals of the program must be consistent with the goals of other organizational programs or the motivational power of SBPA programs was diluted. Teachers in schools with strong conflicting goals were less likely to believe that they could achieve the goals and, indeed, their schools were less successful in improving student performance. Also, schools with goal conflict—for example, magnet schools with strong themes that diverged from the SBPA program goals—often lacked principal leadership that directed teachers to focus on SBPA program goals. This put teachers in the position of having to choose between the SBPA goals or the magnet school goals.

Impact of SBPA Programs

- Focuses attention on goals
- Motivates teachers
- Channels organizational resources

Research showed that the most important motivational factor in determining whether schools succeeded in meeting the SBPA performance goals was whether teachers thought they could collectively produce the desired improvements. But at the same time, we found that teacher expectancy was quite low in the SBPA programs we studied. Our research suggested that expectancy was influenced by the presence of various capacity-building conditions and other supportive district actions, like the creation of an information system and leadership from the principal and central office around standards-based instruction. Also important was teacher knowledge and skills related to improved instruction.

The alignment of vital organizational resources to help teachers improve student performance was identified as important. Specifically, we found that the more successful schools were characterized by strong principal and district leadership supporting program goals, feedback on student assessment measures and results, a history of success with the program, meaningful professional development related to program goals, and structured teacher collaboration. Our research suggested that SBPA programs should be combined with other policies to build school and teacher capacity effectively and to align internal accountability systems with external accountability goals. The programs also should provide focused attention at all levels on achieving improvement goals.

With respect to the bonus itself, our research showed that the salary bonus is one of the top four valued outcomes that teachers experienced as a result of the SBPA program (See Table 1). Other valued outcomes included personal satisfaction from meeting program goals and from seeing improved student performance, opportunities to work with other teach-

Table 1

Desirability of Outcomes Associated with School-Based Performance Award Programs[a]

Outcome[b]	Charlotte-Mecklenburg (Mean)	Kentucky (Mean)
Goal Attainment Rewards		
Receiving a bonus for meeting goals[c]	4.5	4.1
Receiving school improvement funds for meeting goals	4.4	4.1
Public recognition for meeting goals	4.1	4.0
Personal satisfaction for meeting goals	4.3	4.2
Personal satisfaction from improved student performance	4.6	4.4
Learning		
Participation in education reform program	3.6	3.2
Having clear school-wide goals	4.4	4.3
Working cooperatively with other teachers on curriculum and instruction	4.3	4.0
Having your students learn new skills	4.5	4.4
Having additional opportunities for professional development	4.3	3.9
Sanctions		
Public criticism or embarrassment due to not achieving goals[d]	4.4	1.6
Loss of professional pride due to not achieving goals[d]	3.6	1.8
Risks to job security[d]	3.9	1.6
Intervention[d,e]	3.7	1.8
Stress		
Putting in more hours	2.0	1.9
Less freedom to teach things unrelated to goals	2.0	1.9
More pressure and job stress	1.6	1.5

a Scale: 1 = highly undesirable 5 = highly desirable

b All differences between comparable Charlotte-Mecklenburg and Kentucky averages are statistically significant at the .05 level or beyond

c $1,000 in Charlotte-Mecklenburg $2,000 in Kentucky

d Charlotte-Mecklenburg respondents were asked to rate the desirability of avoiding these outcomes. Kentucky respondents were asked to rate the desirability or undesirability of the outcomes themselves

e Charlotte-Mecklenburg respondents were asked about having their school designated a Priority School. Kentucky respondents were asked about having a Distinguished Educator assigned to their school

ers, public recognition for school success in meeting goals, and opportunities to work toward clear school-wide goals. The bonus, together with these other rewards produced by the SBPA program, provided a strong motivation to change teaching practice.

Research did reveal that SBPA programs could also produce some negative consequences. Teachers indicated that in the process of trying to achieve the goals, they experienced a number of negative outcomes, including increased pressure and stress and increased hours worked. Programs with externally imposed standards and continuous improvement components, such as those in Kentucky and Charlotte-Mecklenburg, produced higher levels of pressure and stress than programs without these design features.

Teachers believed that payment of a bonus was appropriate for improvements in school performance; however, in some cases, the bonus was not deemed large enough to be a meaningful incentive for teachers to be motivated by it. Teachers agreed that larger bonuses would be more motivating and that if bonuses were too small, teachers might view them more as insults than incentives. For example, Charlotte-Mecklenburg teachers complained that in light of overall low wages for teachers, the relatively small bonus ($400 to $600 after taxes) was too small to be viewed as a reward for all the additional work it took to earn it.

Further, while the desirability of receiving a bonus was rated relatively high, teachers were not certain that if they achieved the goals they would actually receive the bonus. The doubt about receiving the earned bonuses appeared attributable either to past experiences with bonuses being reneged or to beliefs that the funding for the bonuses would be discontinued. However, despite the general suspicion about actually receiving an earned bonus, teachers in schools that had achieved reward status were more likely to believe that if they met the goals they would be rewarded again.

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Checklist for Creating a More Successful SBPA Program

___ Provide feedback on the results of past assessments to help teachers refine curriculum and instruction.

___ Make sure SBPA goals do not compete with other school goals.

___ Institutionalize a consistent source of funding for school-based performance awards.

___ Set the bonus amount high enough to compensate for increased stress and hours worked.

___ Involve teachers in the design and implementation process so they help decide the level of improvement sought and the mechanics of the program.

___ Measure every performance goal in a systematic, valid, and reliable way.

___ Select equitable measures that address student mobility, students with disabilities, limited English proficient students, students from low-income backgrounds, etc. to calculate rewards.

___ Attain the active support of the principal.

___ Evaluate and adjust the SBPA program as needed.

In addition to the above checklist, more information on SBPA program design and administration can be found in the paper, "School-Based Performance Award Programs: Design and Administration Issues Synthesized from Eight Programs," by Allan Odden, Eileen Kellor, Herbert Heneman, and Anthony Milanowski. The paper is the outgrowth of a research conference on designing and administering SBPA programs sponsored by CPRE-University of Wisconsin in October 1998. The paper is available at www.wcer.wisc.edu/cpre/teachercomp/.

Research also revealed that fairness was central to the success of SBPA programs. For this purpose we defined two types of fairness: *substantive fairness*—the development of program designs that adequately account for differences in student populations and school resources; and *procedural fairness*—establishing, communicating, and following the rules so that teachers know what is expected of them. Procedural fairness also involves providing and following an appeal procedure and treating teachers or schools equitably according to program rules. Both types of fairness appear to be important in order for SBPA programs to be motivating.

We found that, on average, teachers neither agreed nor disagreed that the SBPA programs were substantively fair, and they slightly disagreed that the programs were procedurally fair. Both types of fairness proved to be related to teacher expectancy, with teachers who perceived the programs as fair to be more likely to believe that their efforts could improve student performance.

Implications for Policymakers

It would be inappropriate to suggest that there is only one way to design an SBPA program aimed at improving student achievement. It is evident from the research findings noted above that there is variation in both teacher attitudes and in actual outcomes. However, we believe that our research findings have important policy implications for people who are designing an SBPA program.

SBPA programs work by producing high levels of awareness of program goals and by focusing teacher, school, and district efforts on goal achievement. Thus, the power of SBPA programs is in their ability to focus teacher efforts and channel organizational resources to key educational goals. To that end, program designers must consciously and deliberately align SBPA goals with other school goals. If perfect alignment is not possible, the relative priority of the SBPA goals compared to other goals must be made very clear.

For an SBPA to be successful, teachers must believe that if they try they can succeed in achieving program goals (teacher expectancy). Thus, the power of SBPA programs to motivate could be greatly strengthened by increasing teacher expectancy. One way to do this is by providing more of the conditions needed for the goals to be met; the SBPA program can create or enhance the presence of these conditions. For example, teachers may have more opportunities to collaborate about educational goals as a result of the accountability program. Similarly, school-based performance award programs can foster goal focus, enhance the development of relevant teacher knowledge and skills through opportunities for professional development, focus district efforts, and provide guidelines for policy consistency. The development of knowledge- and skill-based pay and the creation of interventions, such as the Kentucky Distinguished Educator program, for declining schools are but two additional efforts that could enhance the necessary enabling conditions.

Program designers should look to developing rich human capital resources in schools. This can take many forms, including providing appropriate and meaningful professional development opportunities for teachers as well as providing opportunities for teachers to use their strengths in areas beyond the classroom. Linking compensation to knowledge and skills and appropriate professional development can also increase teacher buy-in and motivation to change their practice to improve student achievement.

Another strategy is to establish professional networks external to the school that give teachers insight into program goals and strategies for improvement. For example, in Kentucky, some schools that failed to achieve program goals were provided external educational experts in the subsequent year who worked individually and collectively with teachers to develop teacher knowledge and skills needed to achieve program goals.

A specific area that our research identified as in need of additional focused attention is more active support and program management from principals. The active commitment of principals is crucial to the success of SBPA programs, yet principals often have little or no guidance from the district or state as to how to carry out program goals. Our site interviews revealed a high level of variability in the extent to which the principals fostered teacher commitment to the program. While some were very proactive, others seemed genuinely at a loss as to how to rally their staff and help them achieve the goals. Thus, for an SBPA program to have maximum motivating effect, program designers must pay specific attention to the critical variable of principal leadership.

Program designers must be sure to provide positive outcomes that outweigh the negative outcomes to make it more likely that teachers will change their behaviors in order to meet the goals and receive the salary bonus. A basic assumption underlying SBPA program design is that the goal and the award will act as an incentive; paying salary bonuses appears to provide stronger incentives than other types of performance outcomes, such as publicity and bonuses paid in the form of school improvement funds. Nonetheless, there are trade-offs in any design approach and while continuous improvement and externally imposed standards increase pressure and stress, they also are likely to produce more significant changes to curriculum and instruction over time.

Thus, for an SBPA to be motivating, program designers must be sure that teachers will believe that the bonus and other outcomes associated with goal achievement are worth the effort. One way to do this is to enhance positive outcomes by providing larger award amounts, better feedback on student performance, and enhanced opportunities for teacher collaboration and professional growth. The evidence from our research combined with research on bonus incentives in other types of organizations suggest that bonuses equivalent to 3-5 percent of base salary (about $2,000 per teacher per year) would be meaningful and motivating.

Program designers also must set goals at a level that is achievable so teachers will perceive that they are capable of meeting the goal and thus receiving the award. In addition, teachers must have faith that the award will actually be given to those who meet the goals. This trust could be strengthened by improving communication between labor and management, by attaining a strong and sustained policymaker commitment to the SBPA program, and by providing a funding source that is insulated from cuts due to cyclical variations in educational resources.

Our research suggests that program designers can enhance both substantive and procedural fairness through the involvement of all key parties in the design process to ensure that variations in school context are adequately addressed in the program design. In addition, the program should include an ongoing and significant investment in communication to teachers, principals, district administrators, parents, and the public. The information communicated to these stakeholder groups should go beyond a brief overview of the program. It should include information about program rules and procedures, program outcomes, appeal procedures, material to be covered on the assessment, rubrics and procedures for grading the assessments, changes in the program or assessment, and program rationale over time.

Program designers must be sure that the goals and indicators used to assess progress pass the "face validity" test; that is, can teachers understand them and do they believe that the goals and indicators are a fair assessment of educational progress? If teachers understand and accept the goals, both teacher expectancy and motivation to achieve the goals will be enhanced.

Summary

SBPA programs work to focus teacher and system attention on key educational goals. Current designs have a number of key elements in place, such as rewards that are school-based, a focus on continuous improvement (so each school competes with its own past performance), and frequently, implementation in the context of larger standards-based reform efforts. These programs are most effective when they are combined with comprehensive strategies to build school capacity and focus teacher attention and school and district resources on achieving program goals.

However, our empirical research suggests that the motivational press of SBPA programs could be strengthened by a better communication of goals, enhanced teacher expectancy, enhanced teacher perceptions that earned awards will be funded, and experimentation with larger award amounts. We believe that policymakers could improve the design of their SBPA programs by addressing these areas, as well as by engaging in a participative and well-planned design process.

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More on the Subject

School-Based Performance Award Programs, Teacher Motivation, and School Performance: Findings from a Study of Three Programs, a new CPRE Research Report upon which this Policy Brief was based, is now available. The cost is $10.00 per copy. To order, write: CPRE Publications, 3440 Market Street, Suite 560, Philadelphia PA 19104-3325.

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CPRE on the Internet

For more information about CPRE's teacher compensation project, please visit our site on the world wide web:

www.wcer.wisc.edu/cpre/teachercomp/

This web site describes the history of teacher pay, the current teacher compensation system, and explains alternative forms of teacher compensation. The site describes the work and key findings of CPRE's research on teacher compensation, provides information on state and local school teacher compensation reform initiatives, features an annotated bibliography of teacher compensation publications, and includes a wide variety of resources on teacher compensation.

Additional information about CPRE can be found at on the following web sites:

www.wcer.wisc.edu/cpre/

This site features information on CPRE's school finance, program adequacy, resource reallocation, and teacher compensation projects.

www.upenn.edu/gse/cpre/

This site features a wealth of information including detailed descriptions of current research projects, a paper of the month, biographies of CPRE's researchers, and links to other educational sites. Short descriptions of CPRE's many publications are available and, at present, over 100 different publications can be downloaded from the site at no charge.

New Books by CPRE Researchers

CPRE researchers recently authored two new books based upon CPRE research.

Can Public Schools Learn from Private Schools? Case Studies in the Public and Private Nonprofit Sectors
Available from: Economic Policy Institute, 1660 L Street, N.W., Suite 1200, Washington, D.C. 20036. Phone: 1-800-EPI-4844. Email: publications@epinet.org. Web: www.epinet.org. ISBN: 0-944826-84-9. (1999, $13.95).

Authors Richard Rothstein (Economic Policy Institute), Martin Carnoy (Stanford University), and Luis Benveniste (World Bank) report on case studies conducted to determine whether there are any private school practices that public schools can adopt to improve student outcomes. The book reports on research funded by the Aspen Institute and the U.S. Department of Education's National Institute on Educational Governance, Finance, Policymaking and Management.

School-Based Financing
Available from: Corwin Press, Inc., 2455 Teller Road, Thousand Oaks, CA 91320-2218. Phone: 805-499-9734. Email: order@corwinpress.com. Web: www.corwinpress.com. ISBN: 0-8039-6779-9. (1999, $54.95).

Edited by Margaret Goertz (University of Pennsylvania) and Allan Odden (University of Wisconsin-Madison), this book offers a conceptual overview of the issues involved in designing, implementing, and evaluating school-based financing policies. It also reports on the experiences of three countries that have enacted school-based financing policies, discusses different approaches to funding schools in the United States, and provides insight into how schools allocate and reallocate dollars.

Recent CPRE Publications

Improving State School Finance Systems: New Realities Create Need to Re-Engineer School Finance Structures
Allan Odden
February 1999 (No. OP-04) 43 pp., $6

Explores the inadequacies of state school finance systems and recommends short-term changes that states can make to their funding structures in order to accommodate more fundamental and long-term changes.

Instruction, Capacity, and Improvement
David Cohen and Deborah Loewenberg Ball
June 1999 (No. RR-043) 41 pp., $10

Develops a theoretical view of instruction and then provides an analysis of the environments of instruction. Concludes with a discussion of the problems and possibilities for intervention.

School-Based Performance Award Programs, Teacher Motivation, and School Performance: Findings from a Study of Three Programs
Carolyn Kelley, Herbert Heneman III, and Anthony Milanowski
January 2000 (No. RR-044), $10

Focuses on teachers' motivational reactions to school-based performance award programs, the degree to which teachers' motivational reactions are related to school performance, and principals' assessments of the effects of the programs.

State Strategies for Building Capacity in Education: Progress and Continuing Challenges
Diane Massell
October 1998 (No. RR-041) 63 pp., $12

Examines capacity-building strategies used in eight states (California, Colorado, Florida, Kentucky, Maryland, Michigan, Minnesota, and Texas) and analyzes their promise and continuing challenges.

Teaching for High Standards: What Policymakers Need to Know and Be Able to Do
Linda Darling-Hammond and Deborah Loewenberg Ball
November 1998 (No. JRE-04) 33 pp., $10

Discusses the relationship between teacher knowledge and student performance and describes what states are doing to provide opportunities for teacher learning and with what effects. Summarizes what research suggests about the kinds of teacher education and professional development that teachers need in order to learn how to teach to high standards. (Co-published by CPRE and the National Commission on Teaching and America's Future).

When Accountability Knocks, Will Anyone Answer?
Charles Abelmann and Richard Elmore, with Johanna Even, Susan Kenyon, and Joanne Marshall
March 1999 (No. RR-042) 51 pp., $10

Presents a working theory of school-site accountability among three factors: responsibility, expectations, and internal and external accountability. Short case studies of a diverse sample of schools are included.

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About CPRE

The Consortium for Policy Research in Education (CPRE) unites five of the nation's leading research institutions to improve elementary and secondary education through research on policy, finance, school reform, and school governance. Members of CPRE are the University of Pennsylvania, Harvard University, Stanford University, the University of Michigan, and the University of Wisconsin-Madison.

CPRE conducts research on issues such as:

- education reform
- student and teacher standards
- state and local policymaking
- education governance
- school finance
- teacher compensation
- student incentives

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